

I claim:

1. A cord securing device, comprising at least one housing (1) and at least one sliding device (2), said sliding device (2) being slidably arranged within said housing (1), at least one wall part (1A) of said housing (1) having a first through hole (6B), said sliding device (2) having a second through hole (6C), said first and second through holes (6B, 6C) forming a passage (6) for a cord (4), said first and second through holes (6B, 6C) providing a first and a second securing edge (9, 14) which interact for securing said cord (4) within said cord securing device, wherein one of said through holes is arranged so as to provide a freely interacting a lever arm (L0) of substantial length (L1), in order to produce an adaptive interaction for securing of said cord (4) which is related to the force (S1) that is applied to a first outer part (4A) of said cord (4).

2. A cord securing device according to claim 1, wherein said lever arm (L0) of said first through hole (6B) is positioned within said housing, wherein preferably the depth (L1) of said through hole (6B) is greater than the depth (L2) of said second through hole (6C), and more preferred L1 is 1.2-50 times greater than L2, and even more preferred L1 is at least 2 times greater than L2.

3. A cord securing device according to claim 1, wherein a center line (C1) of the through hole (6B) providing said lever arm (L0) extends in a transverse direction in relation to a plane (P1) which contains a sliding surface (1C) of the housing (1), which interacts with a sliding surface (2C) of said securing part (2A), and that the normal (N1) of said plane (P1) and said center line (C1) forms an angle (a) which is 0 - 80°, preferably 10 - 60°, more preferred 20 - 50°.

4. A cord securing device according to claim 3, wherein said securing part (2A) is slidably arranged within said housing (1) in such a manner that it may substantially, merely be moved into two opposite directions, i.e., one  
5 releasing direction (R) and one securing direction (S), and that said directions are substantially parallel with a plane containing said normal (N1) and said center line (C1).

5. A cord securing device according to claim 2, wherein said housing contains a third through hole (6D) which  
10 also forms a part of said passage (6) for a cord (4), and that said second through hole (6D) provides a third securing edge (13) which inter acts with a fourth securing edge (10).

6. A cord securing according to claim 5, wherein said fourth securing edge (10) is provided by the same through  
15 hole (6C) which provides said second securing edge (9), wherein preferably said second and fourth securing edges (9,10) are provided on the same side of the center line (C2) of said second through hole (6C).

7. A cord securing device according to claim 1, wherein said sliding device (2) comprises a force applying  
20 part (2B) which extends outside of said housing (1) and which is directly or indirectly (2D) interconnected with a gripable portion (20).

8. A cord securing device according to claim 3, wherein said force applying part (2B) is positioned  
25 substantially within the same plane as said normal (N1) and said centerline (C1) and on that side in relation to the first through hole (6B) which is on the side directed to the securing direction (S).

9. A cord securing device according to claim 1, wherein two sliding devices (2<sup>I</sup>, 2<sup>II</sup>) are integrated to form one  
30 single piece (7) and that two housings (1<sup>I</sup>, 1<sup>II</sup>) are slidably arranged onto said single piece (7).

10. A cord securing device according to claim 8, wherein said single piece (7) adjacent each end is provided with an opening (70, 71) for retaining one cord end each.

5 11. A cord securing device according to claim 1, wherein said freely interacting lever arm (L0) is positioned in said sliding device (2) and that the opening of said first through hole (6B) for said first outer part (4A) of said cord (4) is positioned in a level that is the same as or above the surrounding outer surface of the housing (1), at least in  
10 that direction where said outer cord part (4A) is intended to be pulled by said applied force (S1).

12. A cord securing device according to claim 1, wherein two housings (1<sup>I</sup>, 1<sup>II</sup>) are integrated for one single piece and that two sliding devices (2<sup>I</sup>, 2<sup>II</sup>) are slidably  
15 arranged within said single piece.

13. A cord securing device according to claim 11, wherein said single piece adjacent the middle thereof is provided with at least one opening for retaining one or more  
20 cord ends.

14. A cord securing device according to claim 1, wherein said no resilient member is used to urge the sliding device (2).

15. A cord securing device according to claim 1, wherein at least one of said through holes (6B, 6C) is arranged  
25 with a sideways open passage (81;82).

16. A cord securing device according to claim 15, wherein both of said through holes (6B, 6C) are provided with an open passage respectively (81;82).

17. Method for securing a cord, comprising the steps of:

- providing a housing having at least one through hole,
- 5       - providing a sliding device having at least one through hole,
- providing at least one sliding surface on the housing and/or the sliding device, for sliding movement between said housing and said sliding device,
- 10       - providing at least one wall for controlling the sliding movement between said housing and said sliding device,
- providing a first securing edge connected to said housing,
- 15       - providing a second securing edge connected to said sliding device,
- providing a force applying part connected to said sliding device or said housing,
- 20       - providing a lever arm of substantial length connected to said housing or said sliding device, to produce an adaptive interaction for securing a cord (4) positioned between said edges,
- 25       - positioning a cord within and passing through said through holes, such that at least one cord end comes out of one of said through holes,
- applying a force to at least one of said cord end or force applying part, whereby said lever arm of substantial length produces an adaptive interactive force on said cord between said
- 30       securing edges, such that the cord is secured between said edges.

18. Method according to claim 17, wherein said lever arm is freely interacting with said cord end.

19. A cord securing device, comprising at least one housing (1) and at least one sliding device (2), said sliding device (2) being slidably arranged within said housing (1), at least one wall part (1A) of said housing (1) having a first through hole (6B), said sliding device (2) having a second through hole (6C), said first and second through holes (6B, 6C) forming a passage (6) for a cord (4), said housing and said sliding device providing a first and a second securing edge (9, 14) which interact for securing said cord (4) within said cord securing device, wherein there is arranged a lever arm (L0) of substantial length (L1) which extends in a transverse direction in relation to a plane (P1) which contains a sliding surface (2C) of said sliding device (2), in order to produce an adaptive interaction for securing of said cord (4) which is related to the force (S1) that is applied to a first outer part (4A) of said cord (4).

20. A cord securing device, comprising at least one housing (1) and at least one sliding device (2), said sliding device (2) being slidably arranged within said housing (1), at least one wall part (1A) of said housing (1) having a first through hole (6B), said sliding device (2) having a second through hole (6C), said first and second through holes (6B, 6C) forming a passage (6) for a cord (4), said first and second through holes (6B, 6C) providing a first and a second securing edge (9, 14) which interact for securing said cord (4) within said cord securing device, wherein one of said through holes is arranged so as to provide a lever arm (L0) of substantial length (L1), in order to produce an adaptive interaction for securing of said cord (4) which is related to the force (S1) that is applied to a first outer part (4A) of said cord (4) and in that at least one of said through holes (6B, 6C) is arranged

with a sideways open passage (81;82).

21. A cord securing device according to claim 20, wherein both of said through holes (6B, 6C) are provided with an open passage respectively (81, 82).

5           22. A cord securing device, comprising at least one housing (1) and at least one sliding device (2), said sliding device (2) being slidably arranged within said housing (1), at least one wall part (1A) of said housing (1) having a first through hole (6B), said sliding device (2) having a second  
10 through hole (6C), said first and second through holes (6B, 6C) forming a passage (6) for a cord (4), said first and second through holes (6B, 6C) providing a first and a second securing edge (9, 14) which interact for securing said cord (4) within  
15 said cord securing device, wherein one of said through holes is arranged so as to provide a lever arm (L0) of substantial length (L1), in order to produce an adaptive interaction for securing of said cord (4) which is related to the force (S1) that is applied to a first outer part (4A) of said cord (4) and in that at least a part of said sliding device (2) is arranged  
20 such that it protrudes through an opening in the housing that at least partly forms said through hole (6B) and that also comprises said securing edge (13).

23. A cord securing device, comprising at least one housing (1) and at least one sliding device (2), said sliding  
25 device (2) being slidably arranged within said housing (1), at least one wall part (1A) of said housing (1) having a first through hole (6B), said sliding device (2) having a second through hole (6C), said first and second through holes (6B, 6C) forming a passage (6) for a cord (4), said first and second  
30 through holes (6B, 6C) providing a first and a second securing edge (9, 14) which interact for securing said cord (4) within said cord securing device, wherein one of said through holes is arranged so as to provide a lever arm (L0) of substantial

length (L1), in order to produce an adaptive interaction for securing of said cord (4) which is related to the force (S1) that is applied to a first outer part (4A) of said cord (4) and in that there is arranged at least on further through hole (2L) for positioning another end (4C) of said cord in a direction that substantially differs from the extension of any of the other through holes (6B, 6C).

24. A cord securing device, comprising at least one housing (1) and at least one sliding device (2), said sliding device (2) being slidably arranged within said housing (1), at least one wall part (1A) of said housing (1) having a first through hole (6B), said sliding device (2) having a second through hole (6C), said first and second through holes (6B, 6C) forming a passage (6) for a cord (4), said first and second through holes (6B, 6C) providing a first and a second securing edge (9, 14) which interact for securing said cord (4) within said cord securing device, wherein one of said through holes is arranged so as to provide a lever arm (L0) of substantial length (L1), in order to produce an adaptive interaction for securing of said cord (4) which is related to the force (S1) that is applied to a first outer part (4A) of said cord (4) and in that said lever arm (L0) of said first through hole (6B) is greater than the depth (L2) of said second through hole (6C), wherein preferably L1 is 1.2-50 times greater than L2, and more preferred L1 is at least 2 times greater than L2.